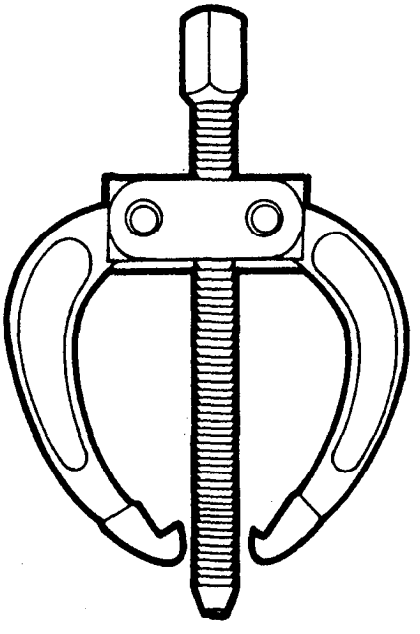
Chapter 41 PULLERS

HOW TO CHOOSE AND USE THEM

The “Types and Uses” section provides you with a list of some of the types of pullers. These pages should help you select the right puller to do the job.

The “Using” section tells you how to use the puller to perform the desired function. The “Care” procedures tell you how to care for the items.



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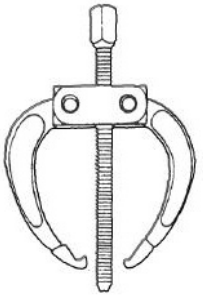
TYPES AND USES

UNIVERSAL GEAR PULLER

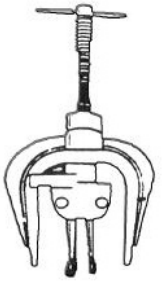
The universal gear puller is usually of yoke and screw construction with two jaws. The jaws have a capacity from 0 to 14 inches in diameter. The universal gear puller is used for pulling gears, pulleys, and wheels.

GEAR AND BEARING PULLER



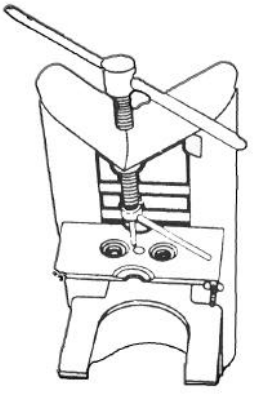
The gear and bearing puller is used to pull gears, bearings, pinions, sheaves, pulleys, and wheels. It is a screw-type puller with two jaws. The grip tightens as pull is increased. The gear and bearing puller has a maximum spread of 5-1/2 inches.

UNIVERSAL BEARING AND BUSHING PULLER



The universal bearing and bushing puller has interchangeable jaws. It provides a pulling capacity of up to 1-1/4 inches. The larger jaws are used for removing bronze or oilite bushings without crumbling them. The smaller jaws are used to pull clutch pilot bearings.

ELECTRICAL UNIT BEARING PULLER



The electrical unit bearing puller is used to pull bearings from shafts of electrical units. It is supplied with plates to fit a variety of unit constructions and to fit behind the particular shaft bearings to be pulled.

BATTERY TERMINAL AND SMALL GEAR PULLER

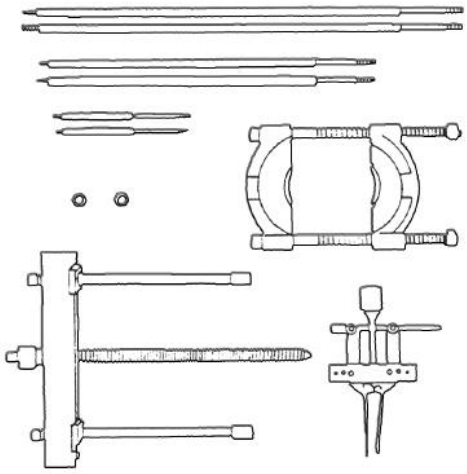
The battery terminal and small gear puller is a screw-type puller for use in close quarters. In addition to pulling battery terminals, it is used to pull small gears and bearings.

STEERING GEAR ARM PULLER

The steering gear arm puller is used for pulling steering gear arms. It also can be used for a wide variety of other pulling jobs. The clamp locks the puller on the arm, leaving both hands free for pulling.

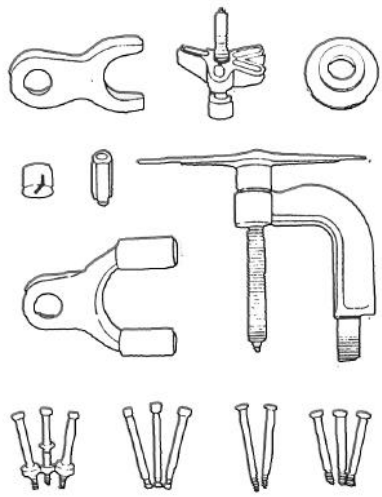
TYPES AND USES - Continued

PUSH AND PULL PULLER SET



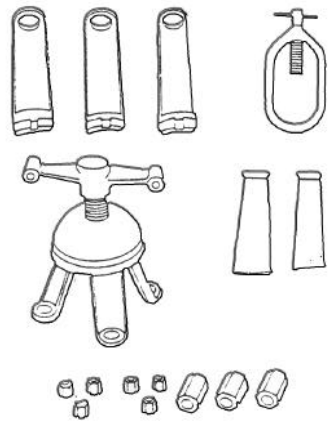
The push and pull puller set is used in conjunction with a variety of attachments and adapters. The push and pull puller consists of a 13-1/2-inch steel bar which is slotted to receive two 9-1/2-inch legs. A pressure screw in the center of the bar is 13 inches long. It has a diameter of one inch, and it is threaded. This puller is universal and versatile. With the use of the bearing pulling attachment, bearing cup pulling attachment, sheave puller attachment, threaded adapters, step plate adapters, additional legs, and many other special adapters, this puller is capable of removing or replacing bearings, gears, pinions, pulleys, wheels, and bushings. The push and pull puller set has many other uses.

STEERING WHEEL PULLER SET



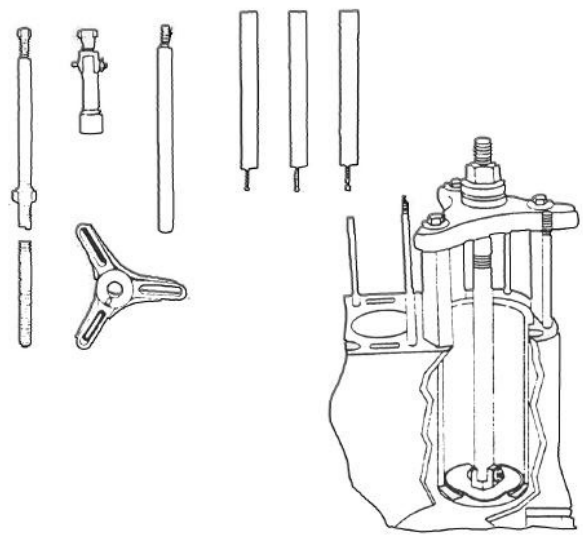
The steering wheel puller consists of all the units necessary for removal of steering wheels from early models of cars and trucks up to the present models.

WHEEL PULLER SET



The universal wheel puller set consists of a body and drive assembly that receives three long jaws, three short jaws, or a special grooved hub set. The interchangeable jaws pivot and swing to any desired bolt circle. Tapered, right and left hand threaded stud nuts complete the set; all of which are carried in a metal case. The wheel puller set is capable of pulling any demountable wheel hub for any passenger car, and most lightweight trucks.

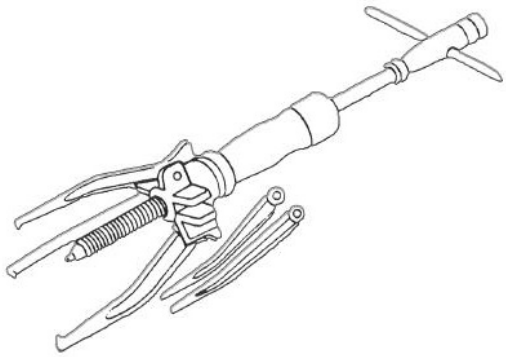
CYLINDER SLEEVE PULLER



The universal cylinder sleeve puller is used to pull cylinder sleeves from engine blocks. It is adjustable to provide clearance regardless of the position of the cylinder studs and to simplify centering the tool over the bore. This puller is used in conjunction with four adapter plates supplied with the puller. The combination is capable of pulling cylinder sleeves 4-1/4, 4-1/2, 4-3/4, and 5-3/4 inches in diameter.

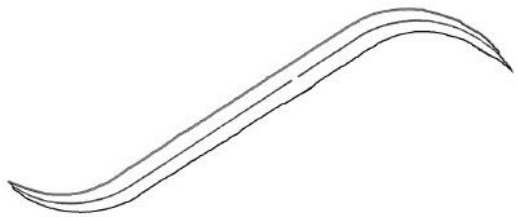
TYPES AND USES - Continued

SLIDE HAMMER PULLER



The slide hammer puller set is a universal-type puller equipped with a two and three-way yoke, three medium jaws for outside pulls and two small jaws for inside pulling. The small jaws can be inserted through a 1/2-inch opening. The capacity of the medium jaws is 6-1/4 inches. The slide hammer puller is also equipped with a locking feature which holds the jaws open or locks them on the work.

COTTER PIN PULLER



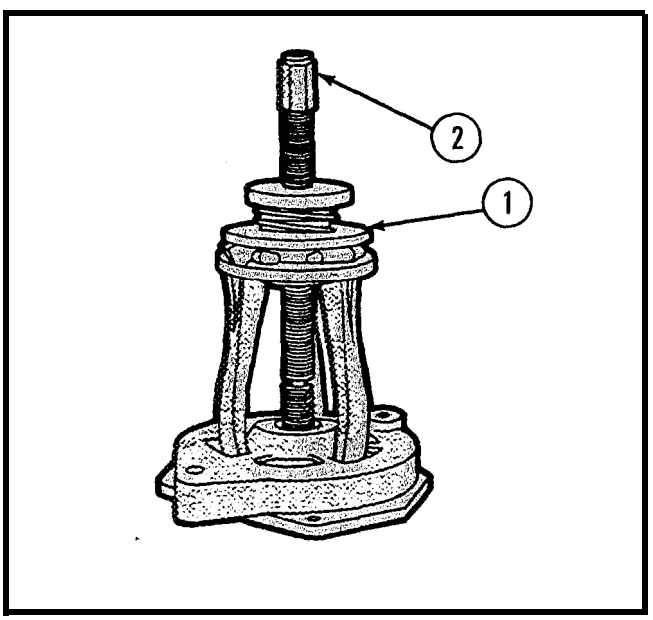
A cotter pin puller is an S-shaped tool used to install or to remove cotter pins. One end is used to insert through the cotter pins for extracting. The other end is used for spreading the cotter pin. The shank is beveled square for easy handling and for a firm grip. This type is seven inches long.

USING A GEAR AND BEARING PULLER

1. Check all gripping edges and threads of a puller for damage before using it.
2. Place the puller (1) firmly in position and secure it.
3. Use the proper size wrench for turning the pressure screw or nut (2) to avoid rounding the corners of the nut or of the screw head.
4. Turn the pressure screw or nut slowly in a clockwise direction until the gear bearing is removed.

WARNING

TURN THE PRESSURE SCREW OR NUT SLOWLY TO PREVENT INJURY AS THE GEAR BEARING IS RELEASED.



USING A SLIDE HAMMER PULLER SET

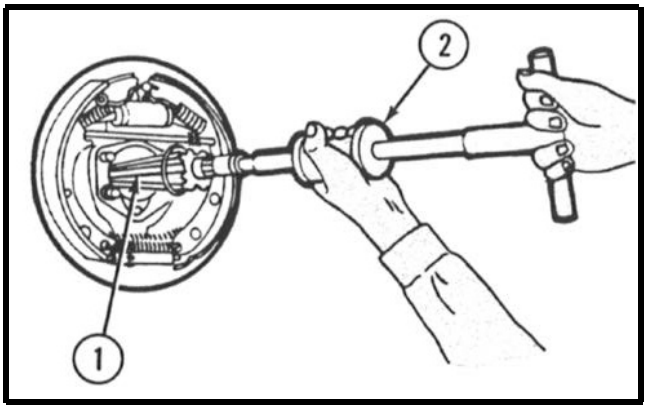
1 Check to make sure that you have all parts before starting the process. Make sure the threads are clean and will move freely.

2 Lock the jaws (1) on the gear with the locking feature and slide the hammer handle (2) up the shaft in the direction of the pull.

WARNING

DO NOT SLIDE THE HANDLE TOO RAPIDLY. THE GEAR MAY FLY OFF AND CAUSE INJURY.

3 Slide the handle in a series of slides until the gear is loose or comes off.



CARE OF PULLERS

1 Keep pullers clean at all times.

2 Do not grease or oil the gripping edges. This will cause the tool to slip.

3 Clean all the tools after use and store so the threads will not become damaged.

4 Make certain that attachments and adapters are stored with the basic puller and that they do not become separated.

5 Oil pullers after use and wipe clean before using again.

6 When storing for long periods, apply a coat of rust-preventive compound on the tools and store them in a dry place.